



Institute
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Pensions Conference 2015

24 – 26 June
Hilton Hotel, Glasgow

03 June 2015



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B4: A changing world

**Environmental risks and their relevance to
pensions actuaries**

Claire Jones, LCP and
IFoA Resource and Environment Board

03 June 2015



Environmental risks are moving up clients' agendas



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Source: <http://www.kwintessential.co.uk/cultural-services/articles/business-meeting-etiquette.html>

3

Key messages

1. The natural environment underpins the economy and hence pension schemes' financial position
2. Environmental risks are becoming increasingly important
3. Schemes are exposed to environmental risks through many routes, including supply chains and legislation
4. Trustees can take practical actions to mitigate environmental risks, particularly through their investment processes

Discussion

How are environmental risks relevant to pension actuaries' current and future advice?

Note: "risks" is shorthand for "risks and opportunities"



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4

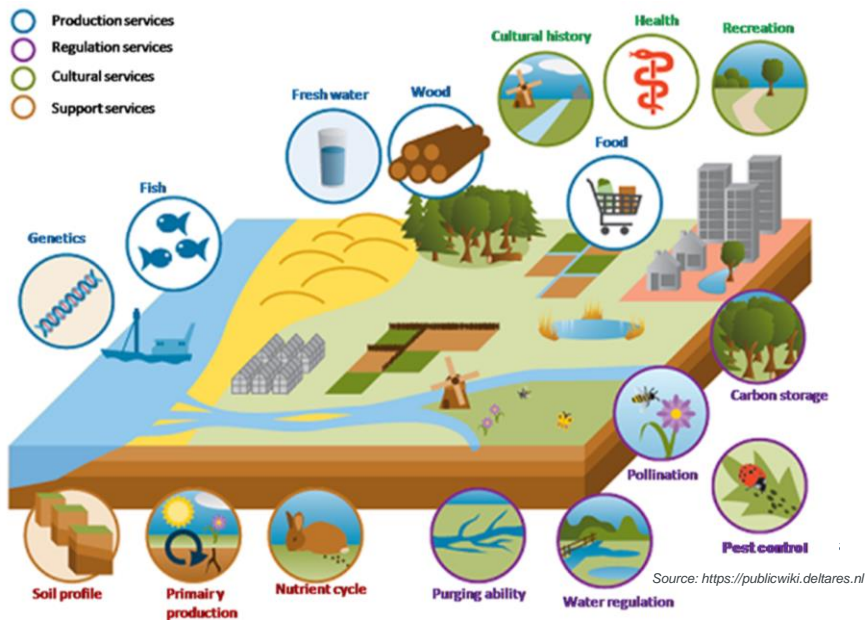


Key message 1

The natural environment underpins the economy and hence pension schemes' financial position

artise
ponsorship
Thought leadership
Progress
Community
Sessional Meetings
Education
Working parties
Volunteering
Research
Shaping the future
Networking
Professional support
Enterprise and risk
Learned society
Opportunity
International profile
Journals
Support

Economic activity relies on the environment



Managing environmental risks can improve financial performance

A recent review of sustainability research found that:

- 90% of the cost of capital studies show that sound sustainability standards lower the cost of capital.
- 88% of the studies show that solid sustainability practices result in better operational performance.
- 80% of the studies show that stock price performance is positively influenced by good sustainability practices.

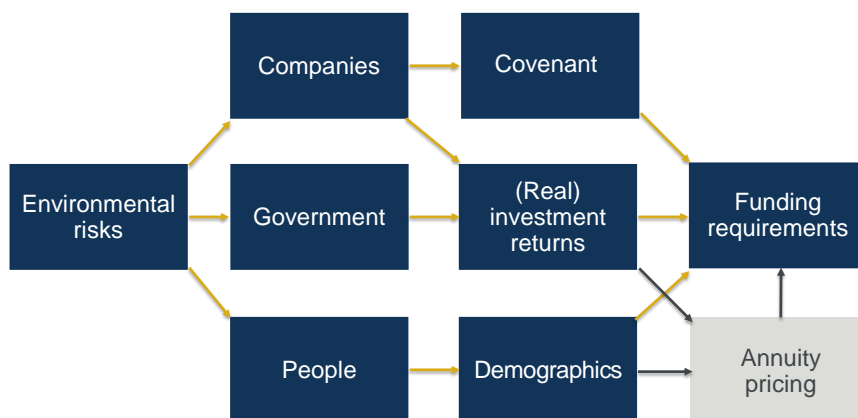
Source: Clark, GL, Feiner, A, and M. Viehs. (2014) "From the Stockholder to the Stakeholder: How Sustainability Can Drive Financial Outperformance." http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2508281



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7

Schemes are exposed to environmental factors through investment, covenant & demographics



Simplified – more complex in practice!



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8

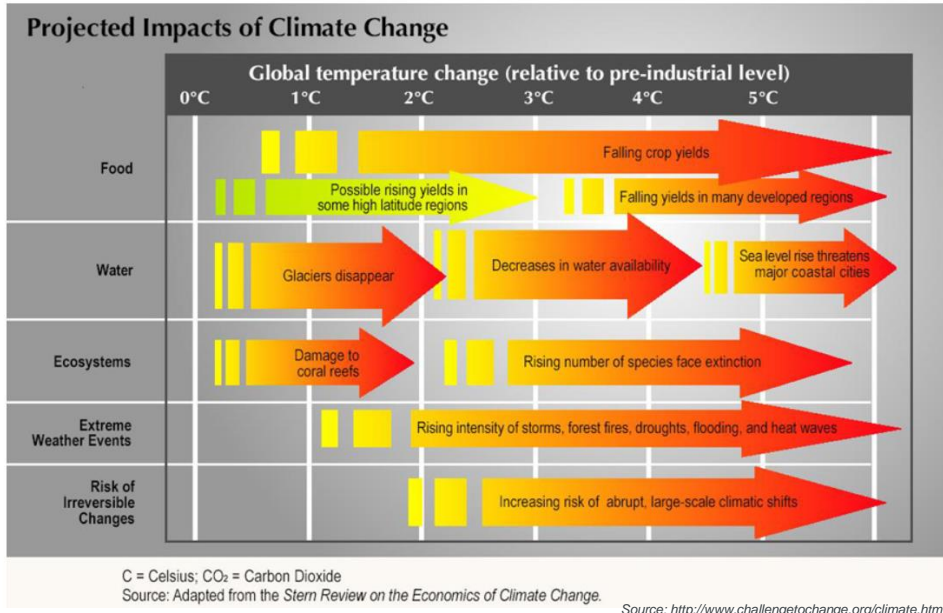
Key message 2

Environmental risks are becoming increasingly important

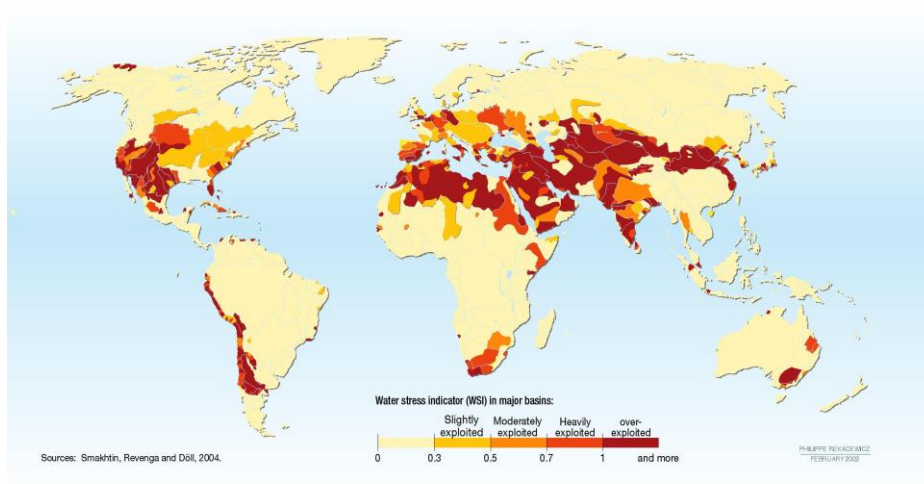
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Examples of environmental risks

Climate change is a major threat



Water scarcity is an increasing concern



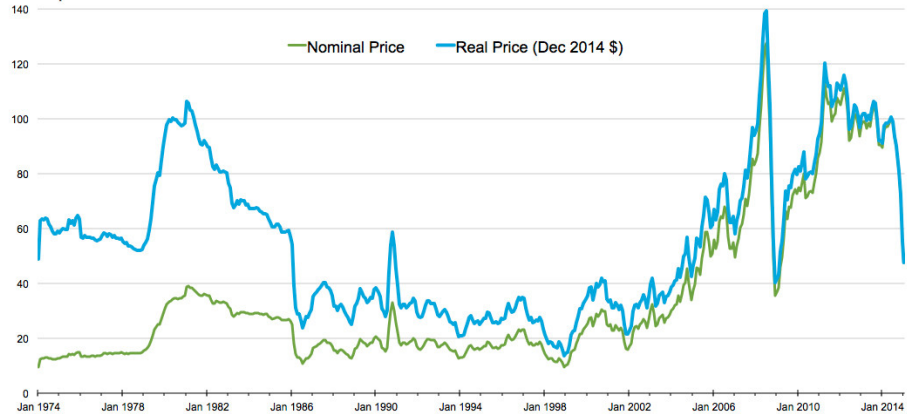
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Source: <http://www.unep.org/dewa/vitalwater/jpg/0222-waterstress-overuse-EN.jpg>

12

Energy prices are uncertain and volatile

Monthly Imported Crude Oil Price
Dollars per barrel



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Source: http://www.huffingtonpost.com/2015/01/13/crude-oil-price-chart_n_6463054.html

13



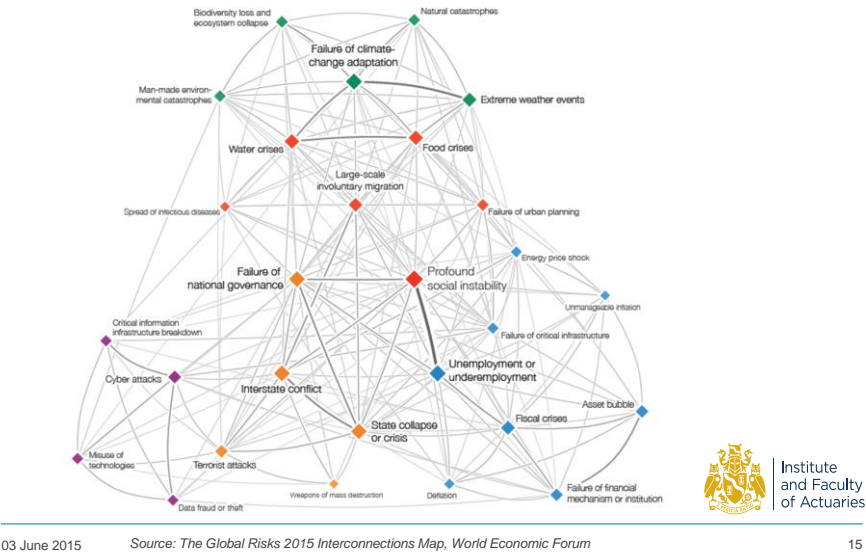
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Key message 3

Schemes are exposed to environmental risks through many routes, including supply chains and legislation

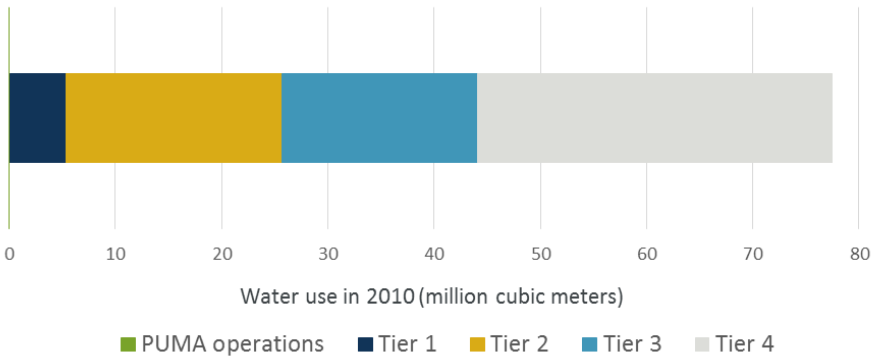
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Our economic, environmental and social systems are highly interconnected



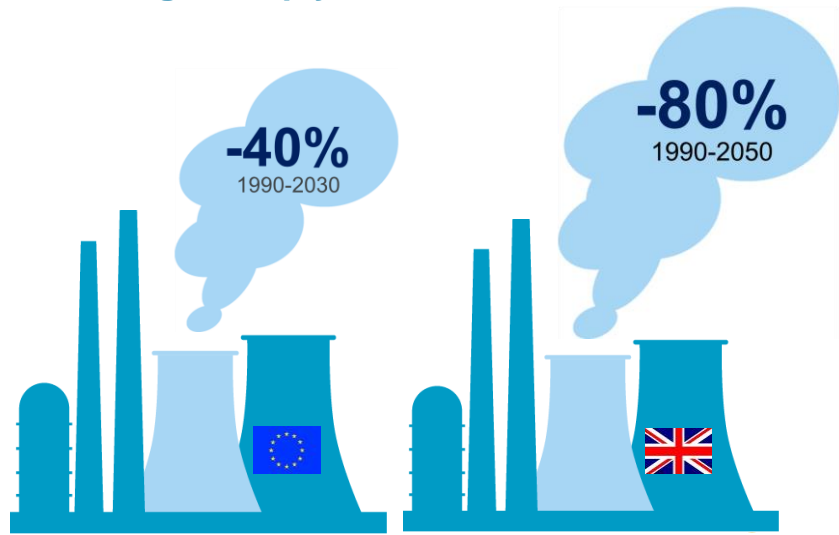
Supply chain risk exposure can be significant

Water use in Puma's supply chain



Source: PUMA's Environmental Profit and Loss Account for the year ended 31 December 2010

GHG targets imply economic transformation



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17

Policy influences investment opportunities



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Source: www.un.org/esa/ffd/overview/third-conference-ffd.html

18

“Stranded assets” is a legislative risk

Mark Carney: most fossil fuel reserves can't be burned
Bank of England governor lends his support to 'carbon bubble' theory that coal, gas and oil assets are at risk
Source: The Guardian (13 October 2014)

Fossil fuel investing a risk to pension funds, says Ed Davey
Energy secretary says action to tackle climate change could make fossil fuel companies the "sub-prime assets of the future"
Source: The Telegraph (6 December 2014)



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19



Key message 4

Trustees can take practical actions to mitigate environmental risks, particularly through their investment processes

- Artise
- Sponsorship
- Thought leadership
- Progress
- Community
- Sessional Meetings
- Education
- Working parties
- Volunteering
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Responsible investment

“Responsible investment is an approach to investment that explicitly acknowledges the relevance to the investor of **environmental, social and governance (ESG) factors**, and the long-term health and stability of the market as a whole. It recognises that the generation of **long-term sustainable returns** is dependent on stable, well-functioning and well governed social, environmental and economic systems.”

Source: UN Principles for Responsible Investment

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21

Active versus passive management



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Source: http://www.gallaudet.edu/rsia/world_deaf_information_resource.html

22

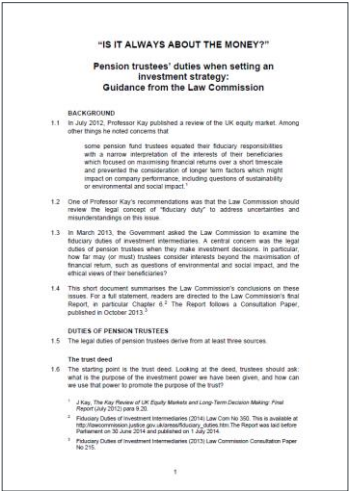
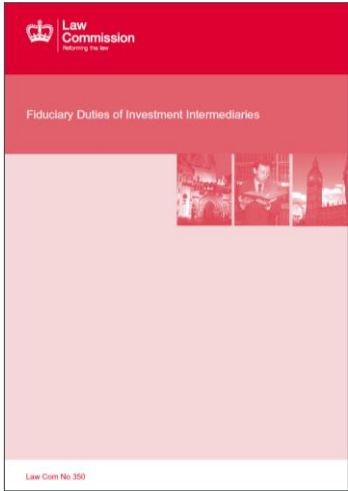
Stewardship

“Stewardship aims to promote the **long term** success of companies in such a way that the ultimate providers of capital also prosper. Effective stewardship benefits companies, investors and the economy as a whole.”

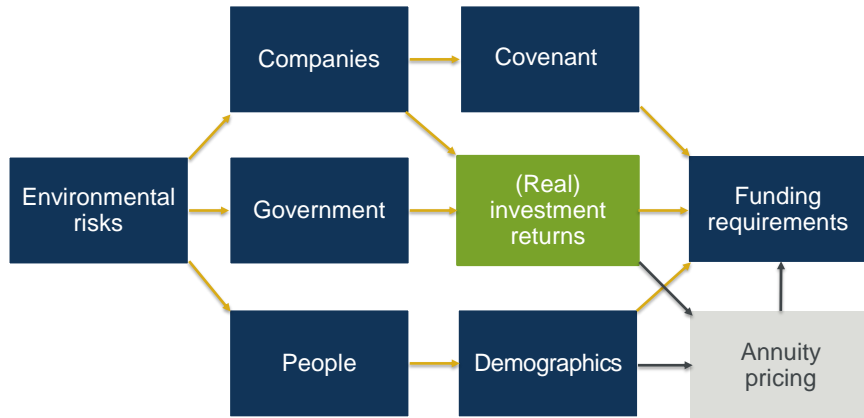
Source: FRC Stewardship Code



Law Commission has clarified “fiduciary duty”



Where can trustees take mitigating action?



Simplified – more complex in practice!



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25

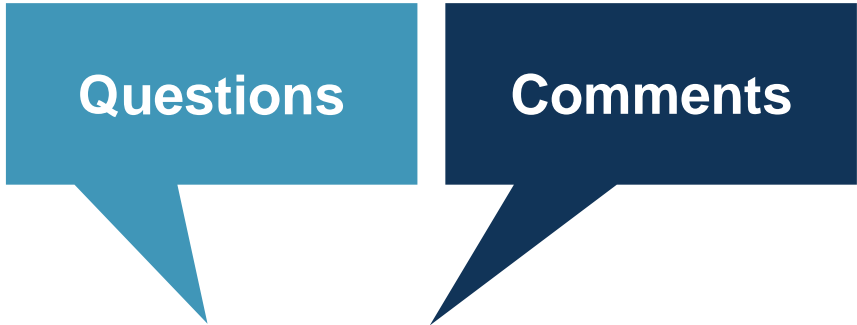
Key messages so far

1. The natural environment underpins the economy and hence pension schemes' financial position
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26



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27



Discussion

How are environmental risks relevant to pension actuaries' current and future advice?

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Sessional Meetings
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Discussion

1. Are your clients interested in this topic? Should they be?
2. How are environmental risks relevant to your advice today? How might they be relevant in future?



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29

IFoA Resource and Environment Board

High-level objectives

- To support actuaries in the existing practice areas with resource and environment issues
- To develop the actuarial profession, enabling actuaries to work in the resource and environment area
- To serve the public interest

Main activities

- Cross-practice collaboration
- Research and thought leadership
- Public affairs
- CPD



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30

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5. Environmental risks are relevant to pension actuaries' current and future advice

Get involved!



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31

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

The views expressed in this presentation are those of the presenter.



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32



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Appendix

Sources of further information

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IFoA Resource and Environment links

- Sign up to the Resource and Environment newsletter:
<http://www.actuaries.org.uk/practice-areas/pages/resource-and-environment-news>
- Commissioned research on Limits to Growth (2013):
<http://www.actuaries.org.uk/members/pages/commissioned-research-limits-growth>
- Literature reviews:
 - Sustainability and the financial system (2015)
<http://www.actuaries.org.uk/sites/all/files/Sustainability%20and%20the%20Financial%20System%20Review%20of%20literature%202015%20FINAL.pdf>
 - Climate change and resource depletion (2011)
<http://www.actuaries.org.uk/research-and-resources/documents/climate-change-and-resource-depletion-challenges-actuaries-review-1>
 - Climate change and resource depletion (2010)
<http://www.actuaries.org.uk/research-and-resources/documents/climate-change-and-resource-depletion-review-literature>



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Further reading

- IPCC AR5 Synthesis Report - Key points and questions
<https://www.gov.uk/government/publications/ipcc-5th-assessment-report-synthesis-report/key-points-and-questions-ipcc-ar5-synthesis-report>
- World Economic Forum - Global Risks report 2015
<http://www.weforum.org/reports/global-risks-report-2015>
- Carbon Tracker Initiative – Unburnable carbon 2013
<http://www.carbontracker.org/report/wasted-capital-and-stranded-assets/>
- Kay Review – UK equity markets and long-term decision-making
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/253454/bis-12-917-kay-review-of-equity-markets-final-report.pdf
- Law Commission - Fiduciary Duties of Investment Intermediaries
http://lawcommission.justice.gov.uk/publications/fiduciary_duties.htm



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